IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently amended): An optical disc apparatus comprising:

an optical pickup for irradiating a light beam through a two-focus lens onto a signal recording surface of an optical disc including the signal recording surface where digital data is recorded to be optically readable, and for detecting reflection light thereof using plural detectors generating at least A, B, C, and D detection signals; said two-focus lens being an objective lens having focuses at two positions;

drive control means for driving and controlling the two-focus lens in an optical axis direction of the light beam;

focus error center value measurement means for measuring a focus error center value detected by the optical pickup;

focus error signal generation means for generating a focus error signal subjected to balance-adjustment based on the reflection light and a variable coefficient Kf; wherein said focus error signal (FE) is generated by the equation, FE = (A+C)-Kf*(B+D); and

focus balance control means for causing the drive control means to control a focus balance, based on the focus error center value measured by the focus error center value measurement means, and the focus error signal generated by the focus error signal generation means and subjected to the balance adjustment;

focus bias voltage supply means for supplying the drive control means with a focus bias voltage; and

focus bias control means for causing the focus bias voltage supply means to supply the drive control means with the focus bias voltage, thereby to cause the drive control means to control a focus bias,

wherein the focus balance control means ~~continuously~~ changes, ~~during a playback mode,~~ the value of said variable coefficient Kf, based on the focus error center value and the balance adjusted focus error signal, until a minimum difference is obtained between the focus error signal and the focus error center value; and

wherein said light beam is focused on said signal recording surface by driving said two-focus lens in a down-search in such a manner that S-shaped fake signals do not occur before S-shaped true signals.

Claim 2. (Canceled).

Claim 3 (Original): The optical disc apparatus according to claim 1, wherein the two-focus lens forms two focus positions by one single objective lens, corresponding to a plurality of discs having respectively different disc substrate thicknesses.

Claim 4 (Original): The optical disc apparatus according to claim 1, wherein the focus error center value measurement means measures an error center value with the two-focus is kept sufficiently distant from a just-focus position.

Claim 5 (Original): The optical disc apparatus according to claim 1, wherein a plurality of values including an initial value used as a reference are set and stored for the coefficient Kf.

Claim 6 (Currently Amended) An optical disc apparatus comprising:

an optical pickup for irradiating a light beam through a two-focus lens onto a signal recording surface of an optical disc including the signal recording surface where digital data

is recorded to be optically readable, and for detecting reflection light thereof using plural

detectors generating at least E and F detection signals; said two-focus lens being an objective

lens having focuses at two positions;

drive control means for driving and controlling the two-focus lens in a radial direction

of the optical disc;

tracking error center value measurement means for measuring a tracking error center

value detected by the optical pickup;

tracking error signal generation means for generating a tracking error signal subjected

to balance-adjustment based on the reflection light and a variable coefficient Kt; wherein said

tracking error signal (TE) is generated by the equation, $TE = E - Kt*F$; and

tracking balance control means for causing the drive control means to control a

tracking balance, based on the tracking error center value measured by the tracking error

center value measurement means, and the tracking error signal generated by the tracking error

signal generation means and subjected to the balance adjustment;

tracking bias voltage supply means for supplying the drive control means with a

tracking bias voltage; and

tracking bias control means for causing the tracking bias voltage supply means to

supply the drive control means with the tracking bias voltage, thereby to cause the drive

control means to control a tracking bias,

wherein the tracking balance control means continuously changes, during a playback

mode, the value of said variable coefficient Kt, based on the tracking error center value and

the balance adjusted tracking error signal, until a main focus spot of said light beam is just

above a recording track on said signal recording surface of the optical disk; and

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wherein said light beam is focused on said signal recording surface by driving said

two-focus lens in a down-search in such a manner that S-shaped fake signals do not occur

before S-shaped true signals.

Claim 7 (Canceled).

Claim 8 (Original): The optical disc apparatus according to claim 6, wherein the

two-focus lens forms two focus positions by one single objective lens, corresponding to a

plurality of discs having respectively different disc substrate thicknesses.

Claim 9 (Original): The optical disc apparatus according to claim 6, wherein the

tracking error center value measurement means measures an error center value with the two-

focus lens kept sufficiently distant from a just-focus position.

Claim 10 (Original): The optical disc apparatus according to claim 6, wherein a

plurality of values including, an initial value used as a reference are set and stored for the

coefficient Kt.

Claims 11-19 (Canceled).